

RESPONSE AND REQUEST FOR RECONSIDERATION

Please enter the amendments as shown. Applicants have amended Claim 1 and canceled Claim 2. Claim 1 has been amended to limit the sulfur and phosphorus content of the antioxidant, that is, the limitation of Claim 2 has been inserted into Claim 1. No other elements of Claim 1 have been limited by this amendment. Support for the amendment to Claim 1 can be found in original Claim 2. It is requested that the Examiner reexamine the present application in view of the above amendments and the following remarks.

Claim 12 has been objected to because an improper space appears between "device" and "," at line 2. Claim 12 has been amended to correct this matter. Accordingly, it is respectfully submitted that the objection should be withdrawn.

Claims 1 and 4-10 have been rejected under 35 U.S.C. 103(a) as being unpatentable over WO 94/22988 to Mobil Oil Corporation in view of U.S. Patent Number 6,165,234 (Kanakkanatt) and U.S. Pre-Grant Publication Number 2004/0186027 (Moreton et al.). Amended Claim 1 now incorporates the limitations found in Claim 2. Accordingly, it is respectfully submitted that the rejection of Claims 1 and 4-10 under 35 U.S.C. 103(a) over the above mentioned prior art references has been overcome and should be withdrawn.

Claim 2 (now amended Claim 1) has been rejected under 35 U.S.C. 103(a) as being unpatentable over Mobil in view of Kanakkanatt and Moreton and further in view of Arrowsmith et al. (U.S. Pre-Grant Publication Number 2004/0077506). Applicants respectfully traverse this rejection.

Applicants' claimed invention relates to a method of operating an internal combustion engine, comprising supplying to the engine a fuel composition containing an antioxidant selected from the group consisting of a sterically hindered phenol; an alkylene or alkylidene coupled sterically hindered phenol oligomer; a secondary aromatic amine; a reaction product of a hydrocarbyl-substituted hydroxyl-containing aromatic compound, an aldehyde, and a carboxyl-substituted phenol; and mixtures thereof, wherein the antioxidant is essentially free of sulfur and phosphorus.

The Examiner maintains that Mobil discloses an antioxidant capable of improving performance of a lubricant in an engine. The Examiner also maintains that Kanakkanatt discloses a flame consumable fuel (e.g. a candle) containing alkylene coupled sterically hindered phenol. The Examiner also maintains that Moreton is drawn to additives for lubricants. The Examiner also maintains that Arrowsmith is drawn to low

phosphorus, sulfur and sulfated ash lubricating oil composition. The Examiner then concludes it would have been obvious to anyone of ordinary skill in the art to use low levels of phosphorus, sulfur and sulfated ash as disclosed by Arrowsmith in Mobil in view of Kanakkanatt and Moreton.

It is respectfully submitted that the Examiner's combination of Mobil, Kanakkanatt, Moreton and Arrowsmith is improper.

Applicants' claimed invention is directed to a method of operating an internal combustion engine by supplying to the engine a fuel composition containing an antioxidant, essentially free of sulfur and phosphorus. The Mobil reference is directed to a fuel composition containing an antioxidant. The Mobil reference does not require that the antioxidant be essentially free of sulfur or phosphorus, that is, there is no teaching, suggestion and/or motivation in the Mobil reference to use an antioxidant essentially free of sulfur or phosphorus in a fuel composition. The Arrowsmith reference is directed to a low phosphorus, sulfur, and sulfated ash lubricant composition. There is absolutely no teaching or suggestion either in the Mobil or Arrowsmith patents which would motivate anyone having ordinary skill in the art to combine these references. Mobil is directed to a fuel composition, while Arrowsmith is directed to lubricant composition. Nothing in these references suggests that one would modify a fuel composition with something found in a lubricant composition. The differences in function and structure between Mobil (a fuel composition) and Arrowsmith (a lubricant composition) are sufficient that one of ordinary skill in the art would not have combined these two references. Mobil and Arrowsmith are non-analogous art and can not be combined. Applicants believe that in light of the amendments made to Claim 1 the Moreton and Kanakkanatt references are not relevant. Applicants respectfully submit that the claimed invention is novel and not suggested by or obvious from the cited art. Therefore any rejection of amended Claim 1 should be withdrawn.

It is respectfully submitted that Claim 3 and 11-15 are unobvious and novel. Claims 3 and 11-15 depend from amended Claim 1. Applicants respectfully submit for the reasons set forth above that amended Claim 1 is novel and unobvious. Therefore Claims 3 and 11-15 are novel and unobvious over the cited prior art. Accordingly, it is respectfully submitted that the rejections to Claims 3 and 11-15 should be withdrawn.

For the foregoing reasons it is submitted that the present claims are in condition for allowance. The foregoing remarks are believed to be a full and complete response to the outstanding office action. Therefore an early and favorable reconsideration is respectfully requested. If the Examiner believes that only minor issues remain to be resolved, a telephone call to the undersigned is suggested.

Any required fees or any deficiency or overpayment in fees should be charged or credited to The Lubrizol Corporation Deposit account 12-2275. A duplicate copy of this document is submitted for such purposes.

Respectfully submitted,
THE LUBRIZOL CORPORATION



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